Inter-regional Workshop on Mainstreaming Ecosystembased Approach to Adaptation and Accessing Adaptation Finance

30 September – 3 October 2014

### Ecosystem-based Adaptation: Framework, Guidelines and Training Manuals



International Ecosystem Management Partnership 国际生态系统管理伙伴计划





## What's on the ground

- An large range of adaptation activities using EBA approaches being implemented in various ecosystems;
- Use a variety of approaches and strategies, integrating EBA approaches in vulnerability & impact assessments, in the development and implementation of adaptation options, and in plans and policies; and
- Implemented by a wide range of actors from conservation, environment, and disaster management communities.



The boundaries and names shown and the designations used on maps do not imply official endorsement or or acceptance by the United Nations Environment Programme or contributory organisations.

# Existing Guidance on EbA

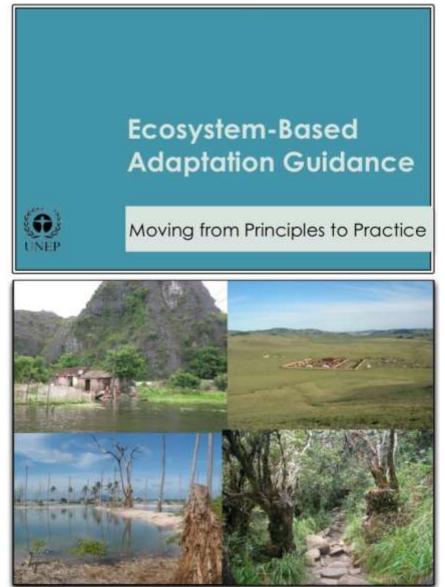
Name/Date	Author/Status	Approach to EbA
A - Principles of Effective EbA (2011)	The Nature Conservancy/final	Principles: Describes a range of objectives that should be met through EbA approaches.
B - Draft Principles and Guidelines for Integrating Ecosystem-based Approaches to Adaptation in Project and Policy Design: A discussion document (2011)	Andrade et al/draft	Integrated: Elaborates refined principles into non- prescriptive guidance. Describes approaches as "about promoting the resilience of both ecosystems and societies", hence the need for full integration (i.e. not ecosystems <u>for</u> societies.)
C - Secretariat for the Pacific Region Environment Programme (SPREP) (2011)	Hills et al/ final	Dual Choice: Offers alternative approaches which focus on either vulnerability of conservation objectives or vulnerability of human development objectives.
D - Operational Guidelines on Ecosystem-based Approaches to Adaptation (2012)	GEF Secretariat/final	Vulnerability-based: The proposed process begins with the "identification of communities or development programmes vulnerable to climate change".
E - Ecosystem-based Adaptation Guidance: A Decision Support Framework (2012)	UNEP/working paper, currently being applied in relevant UNEP projects	Project-based: Suggests that EbA has multiple entry points in the project cycle and practitioners must acknowledge that it should be considered alongside other more reactive or 'hard' solutions.
F - Principles and criteria for effectiveness and relevance of EbA interventions (2013)	ICLEI, Workshop Background Paper	Urban focus: Aims to open the debate on what constitutes effective urban EbA

# EBA Decision Support Framework: Moving from Principles to Practice

- New practical EBA Decision Support Framework and guidance in development to assist planners and decisionmakers develop effective EBA interventions.
- Three strategic questions:
  - How to compare and select EBA vs. other adaptation options?
  - How to design, plan and design the most appropriate EBA option for a specific context?
  - How to evaluate the effectiveness and long-term adaptation outcome of specific EBA measure?

# **Decision Support Framework**

- Final draft 'Protoype' completed March 2012
- Invitation for field testing & further development – using existing/new project as platforms
- Development of training package and courses
- Testing in collaboration with GEF/LDCF projects and UNEP EbA projects
- Input to UNEP EbA projects, NAPAs and NAPs



## Overview of principles for effective EBA

PRINCIPLE	REQUIREMENTS	DETAILS
Promote resilient ecosystems	<ul> <li>Modeling of projected climate change</li> <li>Revised systematic planning</li> <li>Revision of protected area systems design</li> </ul>	EBA approaches cover a broad spectrum in land management, policy and project implementations.
Maintain ecosystem services	<ul> <li>Valuation of ecosystem services</li> <li>Determine climate change impact scenarios</li> <li>Identify options for managing ecosystems or managing use</li> <li>Involve user communities in adaptation action</li> <li>Trade-off analysis</li> </ul>	Maintaining ecosystem services is key – and, again, something that the field of conservation must develop better understanding of how to design and implement, and especially improve our ability to effectively measure benefits provided.
Support cross- sectoral adaptation	<ul> <li>Include approaches in national adaptation plans</li> <li>Incorporate ecosystem services in land/coastal management frameworks</li> </ul>	New opportunities are opening up for partnerships and natural system solutions with many of societies sectors impacted by climate change.
Reduce risks and disasters	<ul> <li>Restore key habitats that reduce vulnerability</li> <li>Involve vulnerable communities in restoration efforts</li> </ul>	There is growing interest in the security, public safety and disaster prevention communities we are seeing increasing awareness of climate impacts and for the potential of natural system solutions.
Complement infrastructure	<ul> <li>Dam re-engineering – maintain ecological flows in rivers</li> <li>Dams, levees – Restoration of floodplains for flood attenuation</li> </ul>	Innovations and strategies like these, for complimenting infrastructure, are being tested now around the world.
Avoid maladaptation	<ul> <li>Improve analysis of impacts from adaptation activities</li> <li>Avoid inadvertent impacts on natural ecosystems and communities</li> </ul>	Some engineered solutions can have significant negative impacts to natural systems

# Barriers to develop and implement effective EBA

- Uncertainty and long timeframes
- Unclear objectives and no single definition of success
- Diverse vulnerability factors and attribution
- Complex, cross-sector problems and activities
- Adaptation interventions implemented over short periods, and attribution to adaptation results over time is challenging
- Lack of guidance in indicator selection
- Unclear definitions, such as 'resilience', which may have different meanings in different contexts
- Limited financing to establish baselines and conduct monitoring
- Lack of information on EBA options compared to 'traditional' technologies

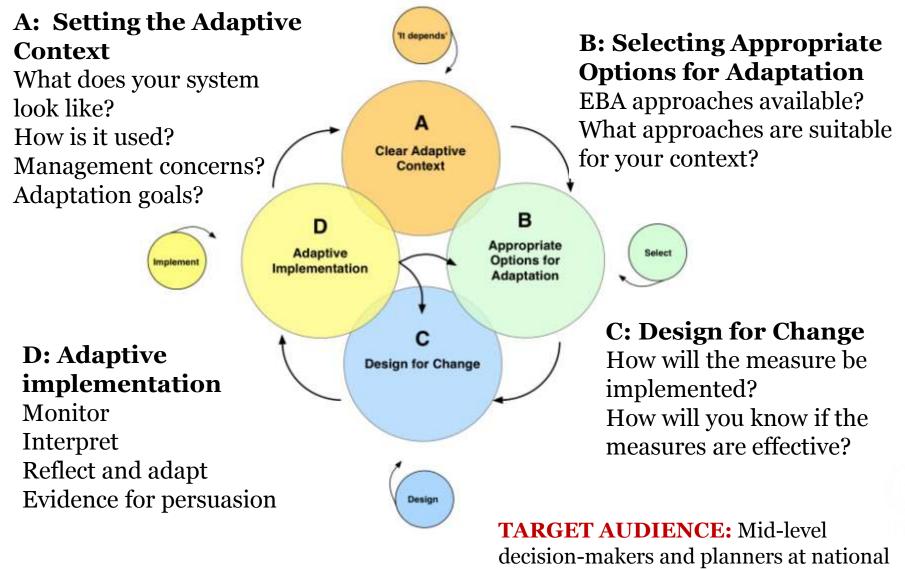
## KEY OBJECTIVES – The EBA Decision Support Framework should be:

- Framed to enable consideration of EBA against a suite of other alternatives and accept that EBA is not always the right option
- Clear context-specificity or 'it depends' factors should be explicitly recognised
- Enable decision-making processes that consider the range of ecosystem services and the accuracy at which they can be quantified
- Built around an M&E framework that is adaptive, and pro-active in framing M&E for project design and full life-cycle of the intervention
- Ensure that the user has the ability to monitor the effectiveness of their selected intervention in achieving its intended outcomes
- Bring together complex information in accessible format to help decisionmaking at different levels

## Some key considerations

- A good adaptation initiative must be measurable and reflective; cost effective; understood within existing policies
- Distinction between 'project M&E' and 'long-term M&E' new EBA M&E is needed to track longer-term implementation and for 'making the case'
- Close link between framing M&E in project design and adaptive implementation is useful to deliver anticipated 'pathway of change'
- Bring together complex information in accessible format to help decision-making at different levels
- Provide a flexible training resource process addressing local needs rather than standard 'off-the-shelf" resource

### EBA Decision Support Framework – a cyclic, iterative approach



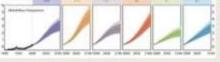
/ local level

# **DSF Components and Associated Activities**

Component	A: Setting the Adaptive Context	B: Selecting Appropriate Adaptation Options	C: Design for Change	D: Adaptive implementation
Description	Supports selection of the most appropriate options for adaptation in a given context. Component A explores this context with a view to establishing where information gaps exist.	Identification of appropriate intervention measures and associated, context specific, adaptive actions.	Supports the transition from a list of selected intervention measures, to develop a program that will guide implementation and define a plan to evaluate and reflect on performance.	Provides users with guidance to be confident in implementing change if and when required.
Outcome	Clear adaptation decision making context defined with a particular understanding of the role of ecosystem services	Appropriate adaptation options prioritised in project context	Plan for implementation and evaluation	An adaptive approach to EBA implementation
Resources	A range of resources to assist in completing Component A is presented in Annex A1-A5. This includes tools, toolkits, reports and papers on ecosystem service valuation and climate risk screening.	A selection of resources for considering adaptation options is presented in Annex B1-B3. Key tools and methods for adaptation option analysis as well as a thorough overview of adaptation technologies is provided	A range of resources to assist in initiative design and monitoring and evaluation are provided in Annex C1-C3. Example indicators are aligned to ecosystem services and guide for selecting indicators are presented.	In text boxes outlining an adaptive approach to initiative implementation and links to adaptive management resources are presented in Annex D1
EBA Focus	Users are asked to consider their ecosystems and the associated services they provide to informing a problem development and goal definition. By defining the problem that an adaptation intervention may wish to address with an ecosystem lens, EBA options are placed on a 'level playing field' with respect to traditional adaptation technologies	Example adaptation technologies are grouped by ecosystem service with their associated benefits and limitations provided to guide the selection of ecosystem- based approaches to adaptation.	Users are guided in project design and evaluation to facilitate long-term adaptive management and deliver 'evidence for persuasion'. This sets the foundation for continued support for EBA initiatives whilst ensuring transparency and accountability in implementation.	Ecosystems-based approaches to adaptation require a long-term view. An adaptive, flexible and sustainable approach is advocated to meet this challenge.

Component A is intended to assist the user in defining a clear adaptive context for decision making at the outset of adaptation project design. Context setting is undertaken with an ecosystem lens.





	You want to establish clear context specific adaptation goals and objectives built around:
Why should I use this guidance?	<ul> <li>Understanding of vulnerability.</li> <li>Understanding the role of ecosystem services within your area of interest.</li> <li>Vision of alternative future where adaptation has occurred.</li> </ul>
What do I need to know to inform decision making process?	<ul> <li>Awareness of your vulnerability profile: sectors, locations.</li> <li>Projections for future change in climate for your area.</li> <li>Understanding of likely impacts on 'key elements' in your specific project context.</li> <li>Consensus from key stakeholders on what a preferred future would look like.</li> </ul>
What activities do I undertake to help me make decisions?	<ul> <li>Select demonstration sites (Question A1).</li> <li>Compile information on system characteristics &amp; ecosystem services (Question A2).</li> <li>Clearly define your problem statement (Question A3).</li> <li>Clearly define your adaptation goals (Question A4).</li> </ul>

#### What should I expect to get at the end of the process?

A clear adaptive decision making context defined with a particular understanding of the role of ecosystems.

## **Component A:**

## Setting the Adaptive Context

Assists the user in evaluating the applicability of adaptation options, including EBA options, to address specified adaptation goals. The user is provided with guidance on (i) a range of options available relative to ecosystem services; and (ii) decision making process to select the most appropriate for their context.



When should I use this component of the guidance?	You want to prioritise potential adaptation options to treat your identified problem and meet your specified adaptation goals. This guidance should be used during project planning phase to ensure that the full range of adaptation technologies, including EBA, are evaluated on relative merit for the discrete adaptation context.
What do I need to know to inform decision making process?	<ul> <li>Clearly defined adaptation goals and objectives that are cognisant of ecosystem services in your context.</li> <li>Information on opportunities and limitations of available options.</li> <li>Criteria to assess context specific applicability.</li> <li>Evaluation scale to assist in prioritisation.</li> </ul>
What activities do I undertake to help me make decisions?	<ul> <li>Select a shortlist of preferred adaptation measures for your context (Question B1).</li> <li>Consider how adaptation measures translate to discrete options in your context (Question B2).</li> <li>Apply evaluation criteria to assess to your adaptation options (Question B3).</li> </ul>

#### What should I expect to get at the end of the process?

Prioritised, appropriate options for your adaptation context.

## **Component B:**

Selecting Appropriate Adaptation Options

Component C supports the transition from a list of selected prioritised intervention measures to develop a programme that will guide implementation and to define a plan to evaluate and reflect on performance.



Why should I use Component C of the guidance?	<ul> <li>You want to develop a plan to implement and evaluate an initiative built upon;</li> <li>A participatory approach.</li> <li>An understanding of short and long term adaptation goals.</li> <li>An adaptive framework.</li> </ul>
What do I need to know to inform decision making process?	<ul> <li>Prioritised adaptation measures that have been developed with a EBA lens.</li> <li>Resources that support program design.</li> <li>An understanding of performance evaluation.</li> </ul>
What activities do I undertake to help me make decisions?	<ul> <li>Develop an initiative that will demonstrate:</li> <li>Accountability and transparency.</li> <li>Deliver evidence for persuasion.</li> <li>Enable long-term adaptive management.</li> </ul>

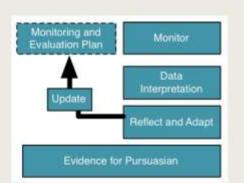
#### What should I expect to get at the end of the process?

An EBA initiative that (i) has clear and context specific goals and objectives; (ii) is based on a foundation of participatory design and implementation; and (ii) enables monitoring for accountability and transparency as well as for long-term adaptive management.

## **Component C:**

# Design for Change

Component D provides users with guidance to be confident in implementing change if and when required.



Why should I use Component D of this guidance?	<ul> <li>You want to ensure an adaptive approach to initiative implementation that will:</li> <li>Demonstrate transparency and accountability; and</li> <li>Facilitate adaptive management in the long-term to deliver positive outcomes for ecosystem services.</li> </ul>
What do I need to inform the decision making process?	<ul> <li>A plan for performance assessment.</li> <li>The schedule for performance reflection, including list of participants and mechanisms for reporting.</li> <li>Flexibility of your initiative: who to notify when change is required, what changes are within the realm of the initiative and what changes must be delivered through broader activities.</li> </ul>
What activities do I undertake to help me make decisions?	<ul> <li>Monitor progress.</li> <li>Data Interpretation.</li> <li>Reflect and adapt.</li> <li>Develop evidence for persuasion.</li> </ul>

## **Component D:**

# Adaptive implementation

#### What should I expect to get at the end of the process?

Adaptive approach to initiative implementation, in the short and long term.

# Question A4: Do you have clearly defined adaptation goals?

Adaptation goals refer to the intended outcomes of the adaptation intervention, both during the lifetime of the initiative and in the future (i.e. longer term adaptation goal). Importantly, these adaptation goals should be consistant of ecosystem service delivery for your area of interest.

#### IF YES:

You understand the primary problems at your intervention site from a systems perspective and have formulated context-specific adaptation goals and objectives to inform selection of adaptation options through Component 'B' Go to COMPONENT 'B'

#### IF NO:

**Consider the following questions:** 

- What is your problem statement?
- What would your preferred future look like?
- How would you get there?
- How would you know if you had achieved your desired results?

For guidance on answering these questions refer to BOX 7.

## BOX 7: GUIDANCE ON DEFINING PREFERRED FUTURES AND CONTEXT-SPECIFIC ADAPTATION GOALS

### 1. What would your preferred future look like?

Describe the characteristics of your ideal future system, including social, cultural, environmental and ecosystem specific characteristics

#### 2. How can you get there?

Consider all of the activities that would need to take place to ensure that the system transitioned to this new future. Some of the activities will be outside the control of your intervention. However, make sure all activities are recorded. You can then be clear later in the project design how your activities contribute to this future and what is beyond the scope of your project.

# 3. How would you know if your system had transitioned to the new desired state, what would it look like?

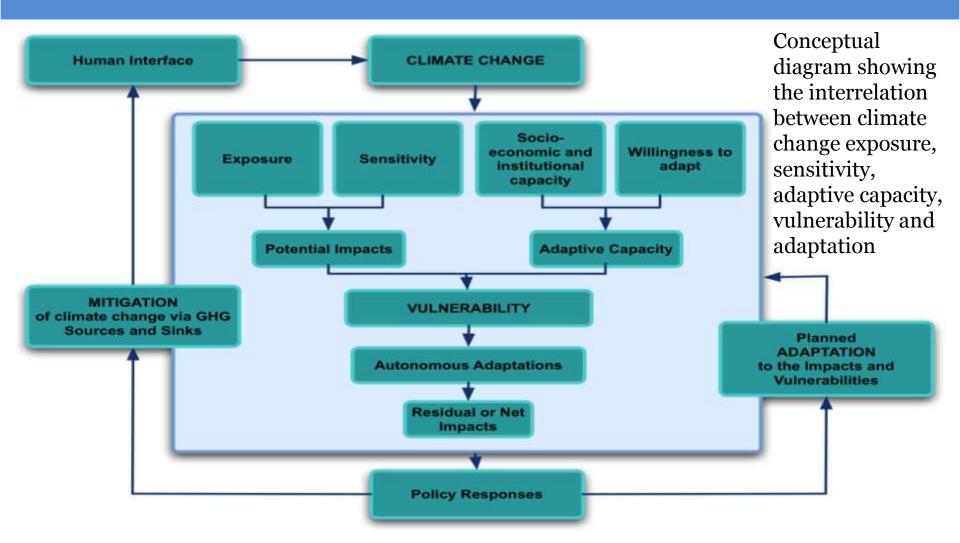
Work with stakeholders to describe 'what success looks like'. Refer back to your preferred future and describe what this looks like in your context. For example, if you noted that your future system would have resilient livelihoods, explain what a resilient livelihood looks like in your context – e.g. households have tin roofs.

#### 4. What are the thresholds for unacceptable change?

Discuss the expected system changes based on socio-economic and climate projections and the associated impacts. Through a collaborative process, work with stakeholders to define the unacceptable changes in your system.

# BOX 3: ASPECTS TO CONSIDER WHEN IDENTIFYING POTENTIALLY VULNERABLE AREAS

- 1. How exposed is the area to the influence of climate change?
- 2. How sensitive is the area to the influence of climate change?
- 3. What is the capacity of the system to manage the impacts of concern?



# Draft Principles and Guidelines for integrating EBA in project and policy design



Draft Principles and Guidelines for Integrating Ecosystem-based Approaches to Adaptation in Project and Policy Design

A Discussion Documen

- Discussion document published in June 2011
- A collaboration between CI, IUCN,
   WWF, Care, BirdLife, CATEI, CEM,
   CIFOR, IDB, WCS, and others
- The principles provide a foundation for considering EBA approaches in policy-making and planning processes
- The guidelines provide a framework for designing EBA projects

# Draft Principles and Guidelines for integrating EBA in project and policy design

## Core Principles for Ecosystem Based Approaches to Adaptation (EbA)

- 1. Is about promoting the resilience of both ecosystems and societies.
- 2. Promotes multi-sectoral approaches.
- 3. Operates at multiple geographical scales.
- 4. Integrates flexible management structures that enable adaptive management.
- Minimizes tradeoffs and maximizes benefits with development and conservation goals to avoid unintended negative social and environmental impacts.
- 6. Is based on best available science and local knowledge, and fosters knowledge generation and diffusion.
- 7. Is about resilient ecosystems, and using nature-based solutions at the service of people, especially the most vulnerable.
- 8. Is participatory, transparent, accountable, and culturally appropriate and actively embraces equity and gender issues.

## Core Guidelines for Ecosystem Based Approaches to Adaptation (EbA)

- 1. Prepare project structure.
- 2. Gather relevant data and expertise.
- Conduct integrated vulnerability assessments and impact projections with flexible criteria that address the linkages between human and environmental systems.
- 4. Locate projects within robust national and sub-national frameworks to enhance long term chances of success.
- 5. Proceed with integrated planning
- 6. Ensure the sustainability of monitoring and adaptive management.

# GEF Operational Guidelines on EBA

- Approved by GEF Council in November 2012
- Aimed at clarifying criteria for projects that intend to employ EBA approaches
- Provide advice to implementing agencies, executing agencies and project proponents that seek funding through LDCF and SCCF for EBA projects
- Complement the review criteria applied on all projects and programmes submitted to the GEF
- Outline the steps for developing a project using EBA approaches

## Gaps and needs in guidelines and training materials

- Lack of robust information on EBA options and measures in comparison to more 'traditional' adaptation technologies
- One size does not fit all need to recognize context
- Need specific EBA-DSF modules, e.g. practical M&E, coupling social & ecological M&E, cost-benefit analysis, ecosystem specific tools
- Coupling social and ecological features in participatory M&E
- Cost-benefit assessments based on comprehensive ecosystem valuation
- Pilot testing in variety of ecosystem and decision contexts Invitation for wide future engagement!
- Training tools, e.g. to support NAPA and NAP implementation, targeted training at decision-making / project level
- Synthesis and sharing of practical learning

## Online resources

## www.EBAflagship.org



## NWP EBA database



### www.elanadapt.net/good-practices



## www.adaptation.cbd.int



According to the Intergretemental Planel in Climate Drungs (PCC) to 2005, the average global bergenature increased by allow 0.7PC and global reset rate law take by 0.1s 27 cm denig the tast sortup. Fortherware, in additional estimate at agroumments (VEC) is 27 cm 2706 projected.





## **THANK YOU!**

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